



SEQUENCE LISTING

<110> WEI, Ming-Hui et al.

<120> ISOLATED HUMAN ENZYME PROTEINS, NUCLEIC
ACID MOLECULES ENCODING HUMAN ENZYME PROTEINS, AND USES
THEREOF

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<140> 10/644,021

<141> 2003-08-20

<150> 09/820,004

<151> 2001-03-29

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<210> 4
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 4

Met	Glu	Phe	Val	Lys	Cys	Leu	Gly	His	Pro	Glu	Glu	Phe	Tyr	Asn	Leu	1	5	10	15
Val	Arg	Phe	Arg	Ile	Gly	Gly	Lys	Arg	Lys	Val	Met	Pro	Lys	Met	Asp	20	25	30	
Gln	Asp	Ser	Leu	Ser	Ser	Ser	Leu	Lys	Thr	Cys	Tyr	Lys	Tyr	Leu	Asn	35	40	45	
Gln	Thr	Ser	Arg	Ser	Phe	Ala	Ala	Val	Ile	Gln	Ala	Leu	Asp	Gly	Glu	50	55	60	
Met	Arg	Asn	Ala	Val	Cys	Ile	Phe	Tyr	Leu	Val	Leu	Arg	Ala	Leu	Asp	65	70	75	80
Thr	Leu	Glu	Asp	Asp	Met	Thr	Ile	Ser	Val	Glu	Lys	Lys	Val	Pro	Leu	85	90	95	
Leu	His	Asn	Phe	His	Ser	Phe	Leu	Tyr	Gln	Pro	Asp	Trp	Arg	Phe	Met	100	105	110	
Glu	Ser	Lys	Glu	Lys	Asp	Arg	Gln	Val	Leu	Glu	Asp	Phe	Pro	Thr	Ile	115	120	125	
Ser	Leu	Glu	Phe	Arg	Asn	Leu	Ala	Glu	Lys	Tyr	Gln	Thr	Val	Ile	Ala	130	135	140	
Asp	Ile	Cys	Arg	Arg	Met	Gly	Ile	Gly	Met	Ala	Glu	Phe	Leu	Asp	Lys	145	150	155	160
His	Val	Thr	Ser	Glu	Gln	Glu	Trp	Asp	Lys	Tyr	Cys	His	Tyr	Val	Ala	165	170	175	
Gly	Leu	Val	Gly	Ile	Gly	Leu	Ser	Arg	Leu	Phe	Ser	Ala	Ser	Glu	Phe	180	185	190	
Glu	Asp	Pro	Leu	Val	Gly	Glu	Asp	Thr	Glu	Arg	Ala	Asn	Ser	Met	Gly	195	200	205	
Leu	Phe	Leu	Gln	Lys	Thr	Asn	Ile	Ile	Arg	Asp	Tyr	Leu	Glu	Asp	Gln	210	215	220	
Gln	Gly	Gly	Arg	Glu	Phe	Trp	Pro	Gln	Glu	Val	Trp	Ser	Arg	Tyr	Val	225	230	235	240
Lys	Lys	Leu	Gly	Asp	Phe	Ala	Lys	Pro	Glu	Asn	Ile	Asp	Leu	Ala	Val	245	250	255	
Gln	Cys	Leu	Asn	Glu	Leu	Ile	Thr	Asn	Ala	Leu	His	His	Ile	Pro	Asp	260	265	270	
Val	Ile	Thr	Tyr	Leu	Ser	Arg	Leu	Arg	Asn	Gln	Ser	Val	Phe	Asn	Phe	275	280	285	
Cys	Ala	Ile	Pro	Gln	Val	Met	Ala	Ile	Ala	Thr	Leu	Ala	Ala	Cys	Tyr	290	295	300	
Asn	Asn	Gln	Gln	Val	Phe	Lys	Gly	Ala	Val	Lys	Ile	Arg	Lys	Gly	Gln	305	310	315	320
Ala	Val	Thr	Leu	Met	Met	Asp	Ala	Thr	Asn	Met	Pro	Ala	Val	Lys	Ala	325	330	335	
Ile	Ile	Tyr	Gln	Tyr	Met	Glu	Glu	Ile	Tyr	His	Arg	Ile	Pro	Asp	Ser	340	345	350	
Asp	Pro	Ser	Ser	Ser	Lys	Thr	Arg	Gln	Ile	Ile	Ser	Thr	Ile	Arg	Thr	355	360	365	
Gln	Asn	Leu	Pro	Asn	Cys	Gln	Leu	Ile	Ser	Arg	Ser	His	Tyr	Ser	Pro	370	375	380	
Ile	Tyr	Leu	Ser	Phe	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Trp	Gln	Tyr	385	390	395	400
Leu	Thr	Thr	Leu	Ser	Gln	Val	Thr	Glu	Asp	Tyr	Val	Gln	Thr	Gly	Glu	405	410	415	
His																			

<210> 5

<211> 417
 <212> PRT
 <213> Homo sapiens

<400> 5

Met	Glu	Phe	Val	Lys	Cys	Leu	Gly	His	Pro	Glu	Glu	Phe	Tyr	Asn	Leu
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Val	Arg	Phe	Arg	Ile	Gly	Gly	Lys	Arg	Lys	Val	Met	Pro	Lys	Met	Asp
			20					25					30		
Gln	Asp	Ser	Leu	Ser	Ser	Ser	Leu	Lys	Thr	Cys	Tyr	Lys	Tyr	Leu	Asn
		35					40					45			
Gln	Thr	Ser	Arg	Ser	Phe	Ala	Ala	Val	Ile	Gln	Ala	Leu	Asp	Gly	Glu
50						55					60				
Met	Arg	Asn	Ala	Val	Cys	Ile	Phe	Tyr	Leu	Val	Leu	Arg	Ala	Leu	Asp
65					70					75					80
Thr	Leu	Glu	Asp	Asp	Met	Thr	Ile	Ser	Val	Glu	Lys	Lys	Val	Pro	Leu
				85					90					95	
Leu	His	Asn	Phe	His	Ser	Phe	Leu	Tyr	Gln	Pro	Asp	Trp	Arg	Phe	Met
		100						105					110		
Glu	Ser	Lys	Glu	Lys	Asp	Arg	Gln	Val	Leu	Glu	Asp	Phe	Pro	Thr	Ile
		115					120					125			
Ser	Leu	Glu	Phe	Arg	Asn	Leu	Ala	Glu	Lys	Tyr	Gln	Thr	Val	Ile	Ala
	130					135					140				
Asp	Ile	Cys	Arg	Arg	Met	Gly	Ile	Gly	Met	Ala	Glu	Phe	Leu	Asp	Lys
145					150					155					160
His	Val	Thr	Ser	Glu	Gln	Glu	Trp	Asp	Lys	Tyr	Cys	His	Tyr	Val	Ala
				165					170					175	
Gly	Leu	Val	Gly	Ile	Gly	Leu	Ser	Arg	Leu	Phe	Ser	Ala	Ser	Glu	Phe
			180					185					190		
Glu	Asp	Pro	Leu	Val	Gly	Glu	Asp	Thr	Glu	Arg	Ala	Asn	Ser	Met	Gly
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Leu	Phe	Leu	Gln	Lys	Thr	Asn	Ile	Ile	Arg	Asp	Tyr	Leu	Glu	Asp	Gln
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Gln	Gly	Gly	Arg	Glu	Phe	Trp	Pro	Gln	Glu	Val	Trp	Ser	Arg	Tyr	Val
225					230					235					240
Lys	Lys	Leu	Gly	Asp	Phe	Ala	Lys	Pro	Glu	Asn	Ile	Asp	Leu	Ala	Val
				245					250					255	
Gln	Cys	Leu	Asn	Glu	Leu	Ile	Thr	Asn	Ala	Leu	His	His	Ile	Pro	Asp
			260					265					270		
Val	Ile	Thr	Tyr	Leu	Ser	Arg	Leu	Arg	Asn	Gln	Ser	Val	Phe	Asn	Phe
		275					280						285		
Cys	Ala	Ile	Pro	Gln	Val	Met	Ala	Ile	Ala	Thr	Leu	Ala	Ala	Cys	Tyr
	290					295					300				
Asn	Asn	Gln	Gln	Val	Phe	Lys	Gly	Ala	Val	Lys	Ile	Arg	Lys	Gly	Gln
305					310					315					320
Ala	Val	Thr	Leu	Met	Met	Asp	Ala	Thr	Asn	Met	Pro	Ala	Val	Lys	Ala
				325					330					335	
Ile	Ile	Tyr	Gln	Tyr	Met	Glu	Glu	Ile	Tyr	His	Arg	Ile	Pro	Asp	Ser
			340					345					350		
Asp	Pro	Ser	Ser	Ser	Lys	Thr	Arg	Gln	Ile	Ile	Ser	Thr	Ile	Arg	Thr
		355				360						365			
Gln	Asn	Leu	Pro	Asn	Cys	Gln	Leu	Ile	Ser	Arg	Ser	His	Tyr	Ser	Pro
	370					375					380				
Ile	Tyr	Leu	Ser	Phe	Val	Met	Leu	Leu	Ala	Ala	Leu	Ser	Trp	Gln	Tyr
385					390					395					400
Leu	Thr	Thr	Leu	Ser	Gln	Val	Thr	Glu	Asp	Tyr	Val	Gln	Thr	Gly	Glu
				405					410					415	

His

<210> 6

<211> 417

<212> PRT

<213> Homo sapiens

<400> 6

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Val	Arg	Phe	Arg	Ile	Gly	Gly	Lys	Arg	Lys	Val	Met	Pro	Lys	Met	Asp
			20					25					30		
Gln	Asp	Ser	Leu	Ser	Ser	Ser	Leu	Lys	Thr	Cys	Tyr	Lys	Tyr	Leu	Asn
		35					40					45			
Gln	Thr	Ser	Arg	Ser	Phe	Ala	Ala	Val	Ile	Gln	Ala	Leu	Asp	Gly	Glu
	50					55					60				
Met	Arg	Asn	Ala	Val	Cys	Ile	Phe	Tyr	Leu	Val	Leu	Arg	Ala	Leu	Asp
65					70					75					80
Thr	Leu	Glu	Asp	Asp	Met	Thr	Ile	Ser	Val	Glu	Lys	Lys	Val	Pro	Leu
				85					90					95	
Leu	His	Asn	Phe	His	Ser	Phe	Leu	Tyr	Gln	Pro	Asp	Trp	Arg	Phe	Met
			100					105					110		
Glu	Ser	Lys	Glu	Lys	Asp	Arg	Gln	Val	Leu	Glu	Asp	Phe	Pro	Thr	Ile
		115					120					125			
Ser	Leu	Glu	Phe	Arg	Asn	Leu	Ala	Glu	Lys	Tyr	Gln	Thr	Val	Ile	Ala
	130					135					140				
Asp	Ile	Cys	Arg	Arg	Met	Gly	Ile	Gly	Met	Ala	Glu	Phe	Leu	Asp	Lys
145					150					155					160
His	Val	Thr	Ser	Glu	Gln	Glu	Trp	Asp	Lys	Tyr	Cys	His	Tyr	Val	Ala
				165					170					175	
Gly	Leu	Val	Gly	Ile	Gly	Leu	Ser	Arg	Leu	Phe	Ser	Ala	Ser	Glu	Phe
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Glu	Asp	Pro	Leu	Val	Gly	Glu	Asp	Thr	Glu	Arg	Ala	Asn	Ser	Met	Gly
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Leu	Phe	Leu	Gln	Lys	Thr	Asn	Ile	Ile	Arg	Asp	Tyr	Leu	Glu	Asp	Gln
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Gln	Gly	Gly	Arg	Glu	Phe	Trp	Pro	Gln	Glu	Val	Trp	Ser	Arg	Tyr	Val
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Lys	Lys	Leu	Gly	Asp	Phe	Ala	Lys	Pro	Glu	Asn	Ile	Asp	Leu	Ala	Val
			245						250					255	
Gln	Cys	Leu	Asn	Glu	Leu	Ile	Thr	Asn	Ala	Leu	His	His	Ile	Pro	Asp
		260						265					270		
Val	Ile	Thr	Tyr	Leu	Ser	Arg	Leu	Arg	Asn	Gln	Ser	Val	Phe	Asn	Phe
	275						280					285			
Cys	Ala	Ile	Pro	Gln	Val	Met	Ala	Ile	Ala	Thr	Leu	Ala	Ala	Cys	Tyr
	290					295					300				
Asn	Asn	Gln	Gln	Val	Phe	Lys	Gly	Ala	Val	Lys	Ile	Arg	Lys	Gly	Gln
305					310					315					320
Ala	Val	Thr	Leu	Met	Met	Asp	Ala	Thr	Asn	Met	Pro	Ala	Val	Lys	Ala
			325						330					335	
Ile	Ile	Tyr	Gln	Tyr	Met	Glu	Glu	Ile	Tyr	His	Arg	Ile	Pro	Asp	Ser
	340						345						350		
Asp	Pro	Ser	Ser	Ser	Lys	Thr	Arg	Gln	Ile	Ile	Ser	Thr	Ile	Arg	Thr
	355						360					365			
Gln	Asn	Leu	Pro	Asn	Cys	Gln	Leu	Ile	Ser	Arg	Ser	His	Tyr	Ser	Pro

370		375		380
Ile Tyr Leu Ser Phe Val Met Leu Leu Ala Ala		Leu Ser Trp Gln Tyr		
385		390		400
Leu Ala Thr Leu Ser Gln Val Thr Glu Asp Tyr		Val Gln Thr Gly Glu		
	405		410	415

His

<210> 7
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 7

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agcgattctc	ctgcctcagc	ctcccaggta	gctgggatta	taggcgcctg	ccaccatgcc	180
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gaactccaga	cctcagggtga	tccgcccggc	ttggcctccc	aaagtgctgg	gattacaggc	300
rtgagccacc	gcgctcggct	agacctgaca	ggttttaaaa	ggattactgg	ttgctgtgtt	360
aaaacagact	gcaggatggc	ttaggtagcc	agtaggtttt	tttttttttt	ggagacgtag	420
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cttccccggg	tcaagtgatt	ctcctgcctc	agcctccgga	gtagttggga	ctacaggcgc	540
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g						601

<210> 8
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 8

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ytttccatcg	cttcacctc	ggtgcttcc	gagttttaaa	atcgccctatc	tacgcttcca	360
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ttggtttttac	ttagattttt	atctgcctca	tgcctgtact	atttgtttaa	tgaatgcata	480
ggaggtgttt	ttattccaac	aagaaaatta	ttcgtacgcg	attattgaat	gaatagacaa	540
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a						601

<210> 9
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 9

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cggttctctg	atcccagata	gctgggactc	caggcacgtg	tcaccaatgc	atggctaatt	180
tttaaatttt	ttttagacaa	caatgtctcg	ctgcattgcc	caggctggtc	ttgaactcct	240
gagctcaagc	gattttccca	cctcagcctt	caaagtgcgt	ggattacagg	tgtgagccac	300
ygacccaac	cagtttctct	ctgcaaaacta	gggaaaaaat	ttacgcttag	cagatattga	360

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gggctgatta tttctatcac agaagcattt ggctatagaa tttcagggtt tagtaaaactt 420
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ttgtgtggca tcacccaaaa gccgagagta atggaaagag caggctgtta gtaatcaggc 540
agatctggct cctgtccaat ctaaactctg ttatttagac taatatctta agtctgttat 600
t                                                    601

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<210> 10
 <211> 601
 <212> DNA
 <213> Homo sapiens

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<400> 10
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tgtgtggcat caccctaaaag ccgagagtaa tggaaagagc aggtctgttag taatcaggca 180
gatctggctc ctgtccaatc taaatcctgt tatttagact aatatcttaa gtctgttatt 240
aagtccgatt tctgacgcta ttaagttagg tgaacaacct tggtaactta acctctgaac 300
yacagttact tcatctgtaa aatagggatg tatgtatggg aacgattttt taaccacaac 360
ttcccaactc taagatggtc tgaaaagaat tttttgagtg tttggctcag aatcacttgg 420
cagcaaaacc tgacttgaag ttgaggcttc attcatccca cttagtatat tcaaagtgtt 480
tgctaaagaa ataattatga ggtgctactt cacactgact agggttgtat atgcatttta 540
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<210> 11
 <211> 601
 <212> DNA
 <213> Homo sapiens

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<400> 11
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agactaatat cttaagtctg ttattaagtc cgatttctga cgctattaag ttaggtgaac 180
aaccttggtg acttaacctc tgaaccacag ttacttcacg tgtaaaatag ggatgtatgt 240
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sagtgttttg ctcagaatca cttggcagca aaacctgact tgaagttgag gcttcattca 360
tcccacttag tatattcaaa tgttttgcta aagaaataat tatgaggtgc tacttcacac 420
tgactagggt tgtatatgca ttttattgcc tattttctaa aacactaaaa atgctaaatt 480
ctgcccaggg tcttgccaca gatgtttcag tggactatgg gcctgtgaga ccttaaaggg 540
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g                                                    601

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<210> 12
 <211> 601
 <212> DNA
 <213> Homo sapiens

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<400> 12
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gactaatatc ttaagtctgt tattaagtcc gatttctgac gctattaagt taggtgaaca 180
accttggtga cttaacctct gaaccacagt tacttcacgt gtaaaatagg gatgtatgta 240
tggtaacgat tttttaacca caacttccca actctaagat ggtctgaaaa gaattttttg 300
wgtgtttggc tcagaatcac ttggcagcaa aacctgactt gaagttgagg cttcattcat 360
cccacttagt atattcaaat gttttgctaa agaaataatt atgaggtgct acttcacact 420
gactagggtt gtatatgcat tttattgcct attttctaaa aactaaaaaa tgctaaattc 480
tgccccaggg cttgccaagc atgtttcagt ggactatggg cctgtgagac cttaaagggt 540

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tgattgagta aggatcacag gtgatgtccg cattgtgctt ggcattggagt taagtgcttg 600
a 601

<210> 13

<211> 601

<212> DNA

<213> Homo sapiens

<400> 13

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ctaataatctt aagtctgtta ttaagtccga tttctgacgc tattaagtta ggtgaacaac 180
cttggttaact taacctctga accacagtta cttcatctgt aaaataggga tgtatgtatg 240
gtaacgattt tttaaccaca acttcccaac tctaagatgg tctgaaaaga attttttgag 300
wggttggtc agaatcactt ggcagcaaaa cctgacttga agttgaggct tcattcatcc 360
cacttagtat attcaaagt tttgctaaag aaataattat gaggtgctac ttcacactga 420
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ccccaggctt tgccacagat gtttcagtgg actatgggac tgtgagacct taaagggttg 540
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a 601

<210> 14

<211> 601

<212> DNA

<213> Homo sapiens

<400> 14

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gttgaggctt cattcatccc acttagtata ttcaaatgtt ttgctaaaga aataattatg 180
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ctaaaaatgc taaattctgc cccaggctct gccacagatg tttcagtggg ctatgggcct 300
ktgagacctt aaagggttga ttgagtaagg atcacagggt atgtccgcat tgtgcttggc 360
atggagttaa gtgcttgata aatgggtggt atcaatctga ttatgtaaat ttatgtaaat 420
tcagttctca agtttgtggt ttttttcccc tcctggagaa atctattcta ttttaaagtg 480
aggaaggctc cgtggagggc tggtagctgg tagctgttca cttgtggaac tttcagcctg 540
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t 601

<210> 15

<211> 601

<212> DNA

<213> Homo sapiens

<400> 15

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ggaagggaca aataggaacc cgccgtattt tccactccct gtgggcctaa aactgctcta 180
aaaaatagtc catgaaaaaa tacatagtac aaacagcaac tctttctgat atgcttgcac 240
ttaaaatcag gctttttctc ctttttgga aaacacagtc cttgtttgct ttagggaaga 300
rtaaagggtca gtgcgtgca ttgcattaat ttcgaaggga aagatgagaa gacatcttga 360
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ggttgacag tggtagtaaa acggcaaaac agattttatt cagaaaaact actgcagtaa 480
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atggcggggg agccgatgt cagtggatgg aaaattatta cgaggaaaca caggggtgtg 600
c 601

<210> 16
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 16
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 gttggacagt ggtagtaaaa cggcaaaaca gattttattc agaaaaacta ctgcagtaag 180
 aggagagaga cctcggtaca gaactgctcc actgcgaata caaagaaaag taggaattga 240
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 t 601

<210> 17
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 17
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 ytgggcgatg caaagacaga tgcgttgagt acaaagtcca ggctttattg ggaagaggat 360
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 t 601

<210> 18
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 18
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 aatcggtgtg ctagggtgat cagatactga agttggggga ttctggtcaa atcaatttag 240
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 actgggagga cgagcgagcc gctcggaagt gcgctgggtt ctcttagcgg ccagtgggtt 420
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 a 601

<210> 19
 <211> 601
 <212> DNA

<213> Homo sapiens

<400> 19

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g 601
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<210> 20

<211> 599

<212> DNA

<213> Homo sapiens

<400> 20

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<210> 21

<211> 269

<212> DNA

<213> Homo sapiens

<400> 21

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<210> 22

<211> 41

<212> DNA

<213> Homo sapiens

<400> 22

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<210> 23

<211> 601

<212> DNA

<213> Homo sapiens

<400> 23
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 g 601

<210> 24
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 24
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 g 601

<210> 25
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 25
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 atcttgctca cggactgttg tggtcataat tgctaacgtg gttgtccggt agcctccata 240
 catgtggaga aagggttaaat aagcattctg agggcagcat aatgtgaggg ttaaaaactc 300
 yggtagccaa gactctgaag ccaggctgcc tgggttgga tctcaaactc cccacttact 360
 aaactgttgg ttacttacaa agactctctg tgcctcagtt tcttcatctg taaaataggg 420
 gtaataataa cacctacctc atgggtattct gaggattcaa agaattaacg taggtaatgc 480
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 g 601

<210> 26
 <211> 601
 <212> DNA
 <213> Homo sapiens

<220>
 <221> variation
 <222> (301)...(301)

<223> 'T' can be either present or absent

<400> 26

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atgtggagaa aggttaaata agcattctga gggcagcata atgtgagggt taaaaactcc 180
ggtagccaag actctgaagc caggctgcct gggttggaat ctcaaactct ccacttacta 240
aactgttggg tacttacaaa gactctctgt gcctcagttt cttcatctgt aaaatagggg 300
taataataac acctacctca tgggtattctg aggattcaaa gaattaacgt aggtaatgct 360
cttagaatgt tagctactgc tgttattatc agtattggaa gtccagtgtt tcttcctgtg 420
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ccgactgtat gatgcagcct acctgtaaca ctgctggcct cttgactacc cggagcctgg 540
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<210> 27

<211> 601

<212> DNA

<213> Homo sapiens

<400> 27

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a 601
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<210> 28

<211> 601

<212> DNA

<213> Homo sapiens

<400> 28

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taggtattgc taagtcaagg cagccctatc ccctcagcag aagtgaggga atatgaaagt 540
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c 601
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<210> 29

<211> 601

<212> DNA

<213> Homo sapiens

<400> 29


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tctcattata cattggaaag atgaaatgtg tagtgagact ttgaatcttc ttttgaatct 540
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a 601

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<210> 30
<211> 601
<212> DNA
<213> Homo sapiens

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<400> 30
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ttatgaaatt tatgaaataa taagaaacat gaggccgggc tcagtggctt atgcctgtaa 480
tcccagcagt ttgggaggcc agggctagtg gatcatgagg tcaggaattt gagaccagct 540
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t 601

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<210> 31
<211> 601
<212> DNA
<213> Homo sapiens

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<400> 31
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taccaaacag tgattgccga catttgccgg agaatgggca ttgggatggc agagtttttg 180
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gattaaaact acacatcaaa acataaggta gggttaggag tcttgccat ttttcatagg 540
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<210> 32
<211> 601
<212> DNA
<213> Homo sapiens

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<400> 32
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<210> 33
 <211> 601
 <212> DNA
 <213> Homo sapiens

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ytccccgcag	cctcaacctc
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gggttttgcc	atgttgccca
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<210> 34
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 34	
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rtttatttta	atTTTTtatta
gtagtggcat	gatcaaggct
cctcagcctc	cccattagct
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ctcaagcgat	tcacctgcct
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<210> 35
 <211> 315
 <212> DNA
 <213> Homo sapiens

<400> 35	
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gacttctttg	tgccctcagtt
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yggagtctca	ctctg

<210> 36
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 36
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 gaagcagaga ttgcggtgag ctacagattgt gccactgcac tccagcctgg gcgacagagt 540
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<210> 37
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 <213> Homo sapiens

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<210> 38
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 38
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 tgctttccat aaaagtgttt cctgcagcca agtactttaa agttttaaaa agacgggtga 540
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<210> 39
 <211> 601

<212> DNA
<213> Homo sapiens

<400> 39

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gacacacaga tgattattaa aaatctgaaa agatgctgag tcttactcct aagaaaaatt 540
cacatttaaa ctactctggg ggctgggcaa ggtggctcac gcctgtaatc tcaacactgg 600
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<210> 40
<211> 601
<212> DNA
<213> Homo sapiens

<400> 40

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<210> 41
<211> 601
<212> DNA
<213> Homo sapiens

<400> 41

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<210> 42
<211> 601
<212> DNA
<213> Homo sapiens

<400> 42
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 aaaatgaact tgatcttcgt gaaagatgag tctgcagcta agagacttta ctgtatatca 480
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 caggctggag tgcaatggcg agatcttgac tcaactgcaac ctccgcccc taggttcaag 600
 c 601

<210> 43
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 43
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<210> 44
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 <212> DNA
 <213> Homo sapiens

<400> 44
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<210> 45
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 45
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 <212> DNA
 <213> Homo sapiens

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<210> 48
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 <212> DNA
 <213> Homo sapiens

<400> 48	
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<210> 49
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 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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gcaacgaagc atctagaagg tctctttggc cttaccggct ctgttttagg taagtccacg 540
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<210> 52
<211> 601
<212> DNA
<213> Homo sapiens

<400> 52
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<212> DNA
<213> Homo sapiens

<400> 53
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<210> 54
<211> 601
<212> DNA
<213> Homo sapiens

<400> 54
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<210> 55
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 55
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<210> 56
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 56
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<210> 57
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 <212> DNA
 <213> Homo sapiens

<400> 57
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<210> 58
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<212> DNA
 <213> Homo sapiens

<400> 58

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<210> 59
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 <212> DNA
 <213> Homo sapiens

<400> 59

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<400> 60

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<210> 61
 <211> 601
 <212> DNA
 <213> Homo sapiens

<400> 61

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